CLAIMS

1.   A process for rendering graphics in a computer environment, comprising the steps of:

binning frame geometries into screen tiles;

determining the visible fragments of said geometries for each of said screen tiles by traversing said geometries multiple times;

rasterizing parameter values for said visible fragments;

shading said visible fragments; and

resolving colors for each pixel.

2.   The process of Claim 1, wherein said binning step includes screen space tiling.

3.   The process of Claim 1, wherein said binning step uses single+ buffering for page memory management.

4.   The process of Claim 1, wherein said determining step generates depth information.

5.   The process of Claim 1, wherein said determining step scan converts primitives.

6.   The process of Claim 1, wherein said determining step outputs visible fragments and visible geometries.

7.   The process of Claim 6, wherein said determining step stores visibility information on a first pass and outputs visibility information on a last pass.